

IN THE CLAIMS

Please cancel claims 18, 22 to 25 and 31 to 39 without prejudice, and amend the claims as follows:

Claims 1 to 18 (canceled).

19. (currently amended) The method according to claim ~~26~~ **18**, wherein ~~the~~ each burner flame has a width viewed in a direction parallel to the longitudinal axis of said carrier, said shapes of the burners being varied so that the widths of the burner flames ~~varies~~ vary dependent upon the location of said respective deposition burner during the reciprocation thereof relative to the blank.

20. (currently amended) The method according to claim ~~26~~ **18**, wherein ~~the~~ each burner flame has a width viewed in a direction perpendicular to the longitudinal axis of said carrier, said shapes of the burners being varied so that the widths of the burner flames ~~varies~~ vary dependent upon the location of said respective deposition burner during the reciprocation thereof relative to the blank..

21. (currently amended) The method according to claim ~~26~~ **18**, wherein said electrical fields vary ~~varies a~~ widths of said burner flames when ~~said~~ the associated deposition burner is in an area of one of said turn-around points.

Claims 22 to 25 (canceled).

26. (currently amended)      **A method for producing an SiO<sub>2</sub> blank, said method comprising:**

**forming SiO<sub>2</sub> particles in a burner flame associated with a deposition burner, said burner flame having a shape; and**

**depositing said particles under the effect of an electrical field on a deposition surface of a carrier rotating about a longitudinal axis thereof;**

**said deposition burner being supported for relative longitudinal reciprocation with respect to the developing blank between turn-around points thereon; and**

**said electrical field varying the shape of said burner flame during the reciprocation thereof dependent upon relative location of said deposition burner relative to the blank;**

**wherein a plurality of deposition burners are used that each have a burner flame with a shape and are spaced apart from one another longitudinally, and that are reciprocated in a predetermined sequence of movement in synchronism along the developing blank between turn-around points, the shape of the respective burner flames being changed in synchronism by said electrical field dependent upon location of said deposition burners during the sequence of movement; and**

~~The method according to claim 22,~~ wherein a plurality of electrical fields are associated with said burner flames and are varied in synchronism in a change cycle correlated with the sequence of movement of said deposition burners.

27. (currently amended) A method for producing an SiO<sub>2</sub> blank, said method comprising:

forming SiO<sub>2</sub> particles in a burner flame associated with a deposition burner, said burner flame having a shape; and

depositing said particles under the effect of an electrical field on a deposition surface of a carrier rotating about a longitudinal axis thereof;

said deposition burner being supported for relative longitudinal reciprocation relative with respect to the developing blank between turn-around points thereon; and

said electrical field varying the shape of said burner flame during the reciprocation thereof dependent upon relative location of said deposition burner relative to the blank;

wherein a plurality of deposition burners are used that each have a burner flame with a shape and are spaced apart from one another longitudinally, and that are reciprocated in a predetermined sequence of movement in synchronism along the developing blank between turn-around points, the shape of the respective burner flames being changed in synchronism by said electrical field dependent upon location of said deposition burners during the sequence of movement;

wherein a plurality of electrical fields are associated with said burner flames and are varied in synchronism in a change cycle correlated with the sequence of movement of said deposition burners; and

~~The method according to claim 26,~~ wherein the change cycles of neighboring electrical fields are in phase.

28. (currently amended) A method for producing an SiO<sub>2</sub> blank, said method

comprising:

forming SiO<sub>2</sub> particles in a burner flame associated with a deposition burner, said burner flame having a shape; and

depositing said particles under the effect of an electrical field on a deposition surface of a carrier rotating about a longitudinal axis thereof;

said deposition burner being supported for relative longitudinal reciprocation relative with respect to the developing blank between turn-around points thereon; and

said electrical field varying the shape of said burner flame during the reciprocation thereof dependent upon relative location of said deposition burner relative to the blank;

wherein a plurality of deposition burners are used that each have a burner flame with a shape and are spaced apart from one another longitudinally, and that are reciprocated in a predetermined sequence of movement in synchronism along the developing blank between turn-around points, the shape of the respective burner flames being changed in synchronism by said electrical field dependent upon location of said deposition burners during the sequence of movement;

wherein a plurality of electrical fields are associated with said burner flames and are varied in synchronism in a change cycle correlated with the sequence of movement of said deposition burners; and

~~The method according to claim 26,~~ wherein the change cycles of neighboring electrical fields are phase-shifted.

29. (currently amended) A method for producing an SiO<sub>2</sub> blank, said method comprising:

forming SiO<sub>2</sub> particles in a burner flame associated with a deposition burner, said burner flame having a shape; and

depositing said particles under the effect of an electrical field on a deposition surface of a carrier rotating about a longitudinal axis thereof;

said deposition burner being supported for relative longitudinal reciprocation relative with respect to the developing blank between turn-around points thereon; and

said electrical field varying the shape of said burner flame during the reciprocation thereof dependent upon relative location of said deposition burner relative to the blank;

wherein a plurality of deposition burners are used that each have a burner flame with a shape and are spaced apart from one another longitudinally, and that are reciprocated in a predetermined sequence of movement in synchronism along the developing blank between turn-around points, the shape of the respective burner flames being changed in synchronism by said electrical field dependent upon location of said deposition burners during the sequence of movement;

wherein a plurality of electrical fields are associated with said burner flames and are varied in synchronism in a change cycle correlated with the sequence of movement of said deposition burners; and

~~The method according to claim 26,~~ wherein the change cycles of neighboring electrical fields are in phase opposition.

30. (currently amended) The method according to claim ~~26~~ **18**, wherein said electrical fields ~~are~~ **is** adjusted so as to avoid a gas discharge.

Claims 31 to 39 (canceled).

40. (new) A method for producing an SiO<sub>2</sub> blank, said method comprising:

forming SiO<sub>2</sub> particles in a plurality of burner flames each associated with a respective one of a plurality of deposition burners, said burner flames being each having a shape and being spaced apart from one another longitudinally; and

depositing said particles under the effect of a plurality of electrical fields each associated with a respective burner flame on a deposition surface of a carrier rotating about a longitudinal axis thereof;

said deposition burners being reciprocated in a predetermined sequence of movement in synchronism in an axial direction relative to the developing blank between turn-around points thereon;

said plurality of electrical fields being varied in synchronism in a change cycle correlated with the sequence of movement of said deposition burners so that the shapes of the respective burner flames are changed in synchronism by said electrical fields dependent upon location of said deposition burners relative to the blank during the sequence of movement.

41. (new) The method according to claim 40, wherein each burner flame has a width

viewed in a direction parallel to the longitudinal axis of said carrier, said shapes of the burners being varied so that the widths of the burner flames vary dependent upon the location of said respective deposition burner during the reciprocation thereof relative to the blank.

42. (new) The method according to claim 40, wherein each burner flame has a width viewed in a direction perpendicular to the longitudinal axis of said carrier, said shapes of the burners being varied so that the widths of the burner flames vary dependent upon the location of said respective deposition burner during the reciprocation thereof relative to the blank.

43. (new) The method according to claim 40, wherein said electrical fields vary widths of said burner flames when the associated deposition burner is in an area of one of said turn-around points.

44. (new) The method according to claim 40, wherein the change cycles of neighboring electrical fields are in phase.

45. (new) The method according to claim 40, wherein the change cycles of neighboring electrical fields are phase-shifted.

46. (new) The method according to claim 40, wherein the change cycles of neighboring electrical fields are in phase opposition.

47. (new) The method according to claim 40, wherein said electrical fields are is adjusted so as to avoid a gas discharge.